In contrast, the cited Robinson et al patent describes a system where a SPROC cells

Function Library exists and already contains signal flow parameters of blocks in a signal flow

system (col 34, lines 21-27). Robinson does not use "global geometric variables" which "relate

to a physical layout of element blocks of the semiconductor structure".

Ho 6,421,814 B1

The newly cited Ho et al patent 6,421,814 B1 relates to the design and fabrication of

integrated circuits. Apparently one of the features of the system is the use of a "R and C Extract

Database" to allow refining of a circuit simulation database to consider "extracted parasitics" in

addition to a more straight-forward simulation based upon connection. The patent indicates that

the Device Parameter Extraction feature "will extract device parameters including, width, length,

area of source, area of drain, perimeter of source, perimeter of drain, net resistance of drain, and

net resistance of source." Ho et al states that it allows circuit simulations to include "extracted

parasitics" based on "file definitions and libraries which include information on the process

technology and parasitics for predefined structures." (Col 5, lines 20 - 24) Ho also refers to a

Connectivity Based Database 143 "where the geometries of the layout are organized by nets of

the integrated circuit." In an RC Interconnect Extraction module 141 layout parasitics are

apparently extracted for an integrated circuit and a database of extracted parameters is created.

Applicant is unable to find in Ho any suggestion that any system shown there utilizes

"programmable design cells" where each cell has a set of parameters "created by relating the

corresponding local variables within a local file to appropriate global geometric variables from

the global file such that changes of global geometric variables in the global file may cause

changes in the design cells in accordance with parameters in the local files."

Claimed features are lacking in the combination proposed in the Office Action.

In order for a rejection to establish a *prima facie* case of obviousness, the combination of

the cited Robinson and Ho patents must teach or suggest all the claim elements. M.P.E.P. § 2142

(citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir. 1991)).

Claim 1 recites:

> "a plurality of programmable design cells, each cell corresponding to a local file and
> having a set of parameters created by relating the corresponding local variables within a
> local file to appropriate global geometric variables from the global file such that changes

of global geometric variables in the global file may cause changes in the design cells in accordance with parameters in the local files." *(Applicant's claim 1.)*

Claim 9 recites:

"A computer-readable medium having a computer program stored thereon to cause a suitably equipped computer to update a set of geometric parameters of a design cell by relating local geometric variables of a local file for the design cell to a global file of global geometric variables relating to layout of element blocks of a hierarchical semiconductor structure such that changes of a global geometric variable in the global file may cause changes in the cells in accordance with parameters in the local files." *(Applicant's claim 9.)*

Claim 15 recites:

"a computer program executed by the processor from the medium to automatically update a set of parameters for each of a plurality of programmable design cells, each cell having a corresponding local file, by reading, from the global file, values for the global geometric variables to which the local variables of the local file correspond." *(Applicant's claim 15.)*

Claim 22 recites:

"updating a set of parameters of a programmable design cell by relating corresponding local variables of a local file corresponding to the programmable design cell to corresponding global geometric variables of the global file." *(Applicant's claim 22.)*

In contrast to the elements quoted above from each of the independent claims, and <u>as conceded in the Office Action</u>, Robinson does not describe "geometric variables related to physical layout in hierarchical manner as described." (See Office Action page 3, lines 4-5) While the cited Ho patent generally refers to geometric variables in hierarchical design of an integrated circuit, Applicant is unable to find where Ho shows or suggests relating corresponding local variables within a local file to global geometric variables in the global file to cause changes in the design cells in accordance with parameters in the local files, as claim 1 requires.

The statement in the Office Action in connection with the rejection of claims 1 and 9, as to the combination of Ho and Robinson (page 3, lines 10 - 13) does not show how the teachings of Ho and Robinson can be combined to provide the specific structure claimed in the above quoted portions of independent claims 1 and 9.

The statement in the Office Action in connection with the rejection of claim 15, as to the

combination of Ho and Robinson (page 5 , lines 7 -10) does not show how the teachings of Ho and Robinson can be combined to provide the specific structure claimed in the above quoted portion of independent claim 15.

The statement in the Office Action in connection with the rejection of claim 22, as to the combination of Ho and Robinson (page 6, lines 8 - 11) does not show how the teachings of Ho and Robinson can be combined to provide the specific structure claimed in the above quoted portion of independent claim 22.

Claims 2-8, 10-14, 16-21 and 23-25 depend, directly or indirectly, on ameded claims 1, 9, 15 and 22, respectively, and are patentable over the proiposed combination of the cited Robinson and Ho patents for the reasons argued above, as well as for inclusion of the additional elements in the claims. Since each independent claim is patentable over the cited Robinson patent, all claims depending from them are also patentable.

Reconsideration and withdrawal of the rejection and allowance of claims 1 - 25 is respectfully requested.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 373-6970 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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Date _____January 6, 2003_____ By _____
                                        Charles E. Steffey
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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, Washington, D.C. 20231, on this _6_ day of January, 2003.

_____Tina Kohout_____   _____
Name   Signature